

# HDD Market Update: Changing Paradigms

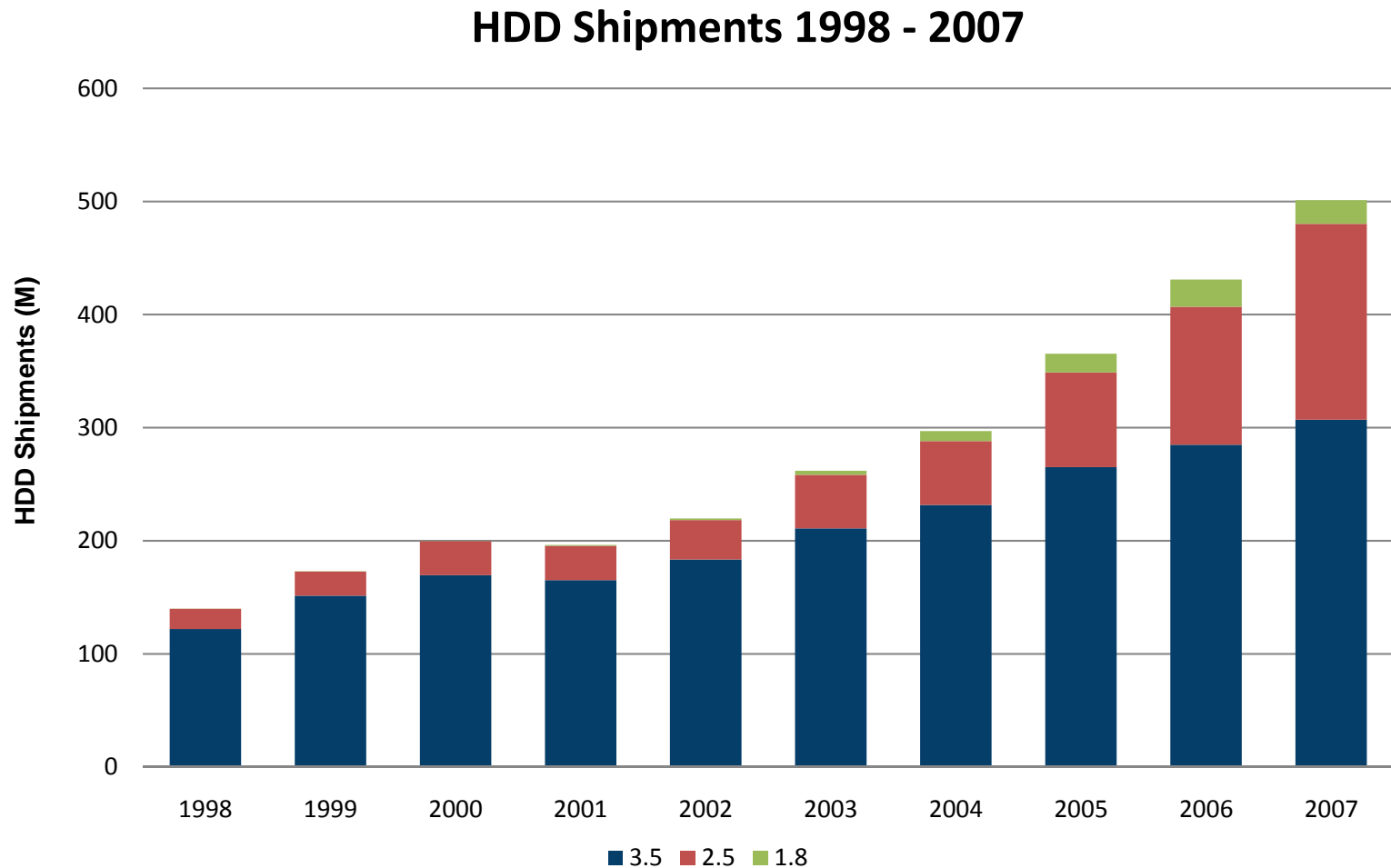
New growth drivers and seasonality  
patterns emerging

# Topics

- Past HDD Market Trends
- Current HDD Market Trends
- PC/HDD/SSD Outlook
- Conclusions

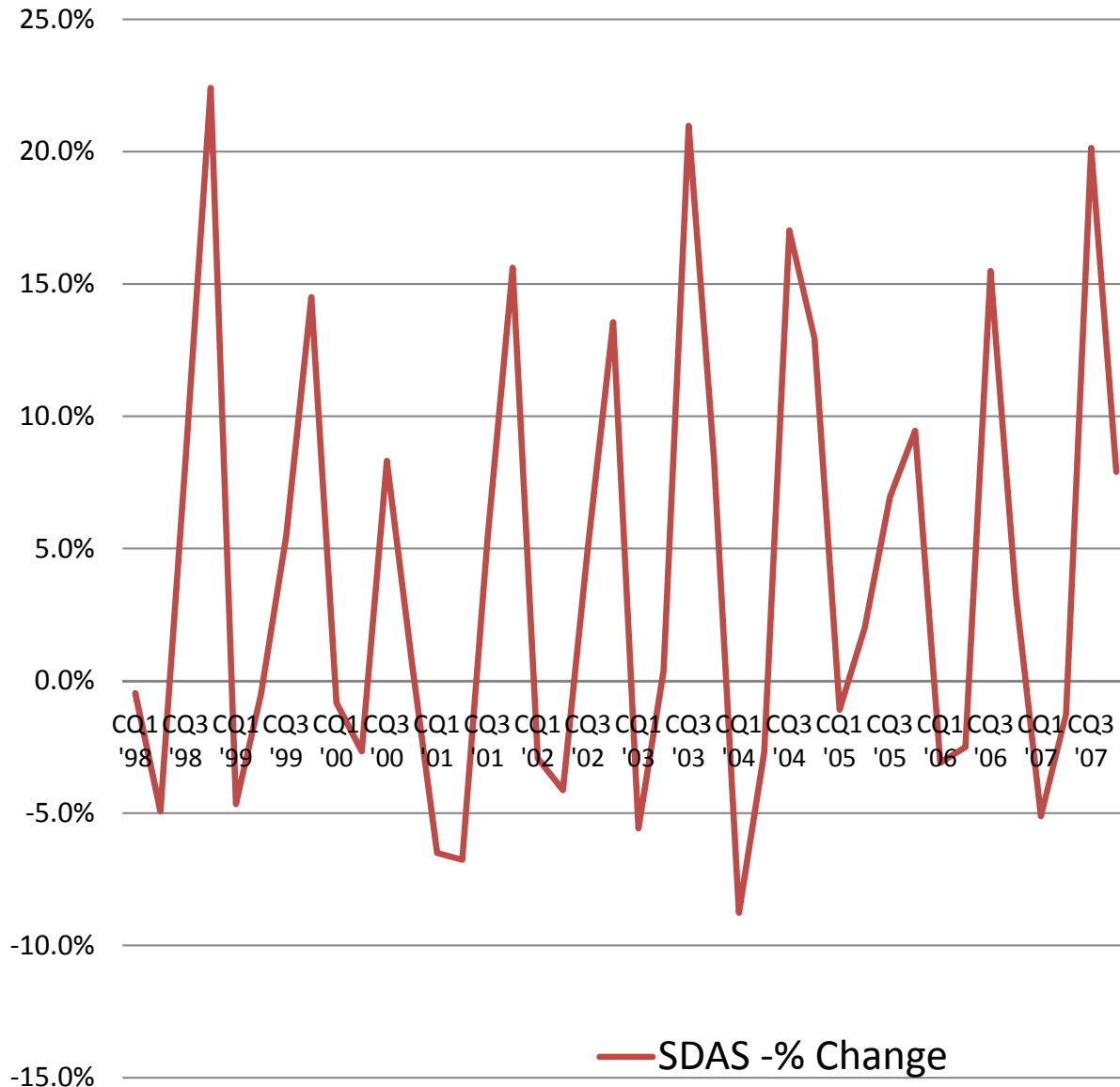
# HDD Market: 1998 - 2007

- Solid CAGR with predictable seasonality



# Predictable Seasonality

HDD Quarterly Shipment % Change (1998 - 2007)

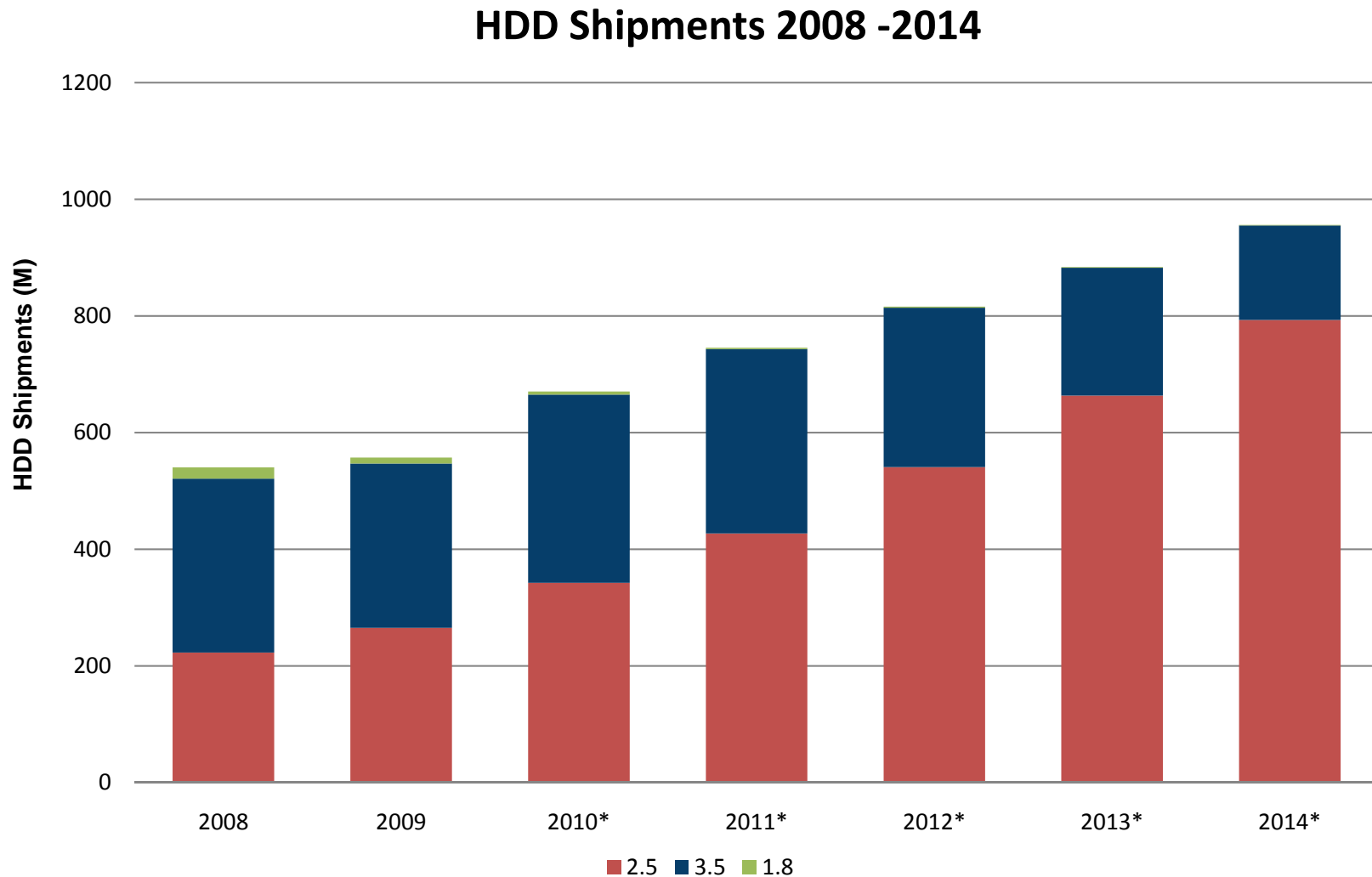


# 1998 – 2007

- HDD market growth drivers
  - PCs: desktop
  - Servers: traditional SCSI & Fibre
- Seasonal trends
  - CQ1 & CQ2 down (single digit)
  - CQ3 & CQ4 up (high single or low double digit)
- Developed Nations
  - US, EMEA, Japan

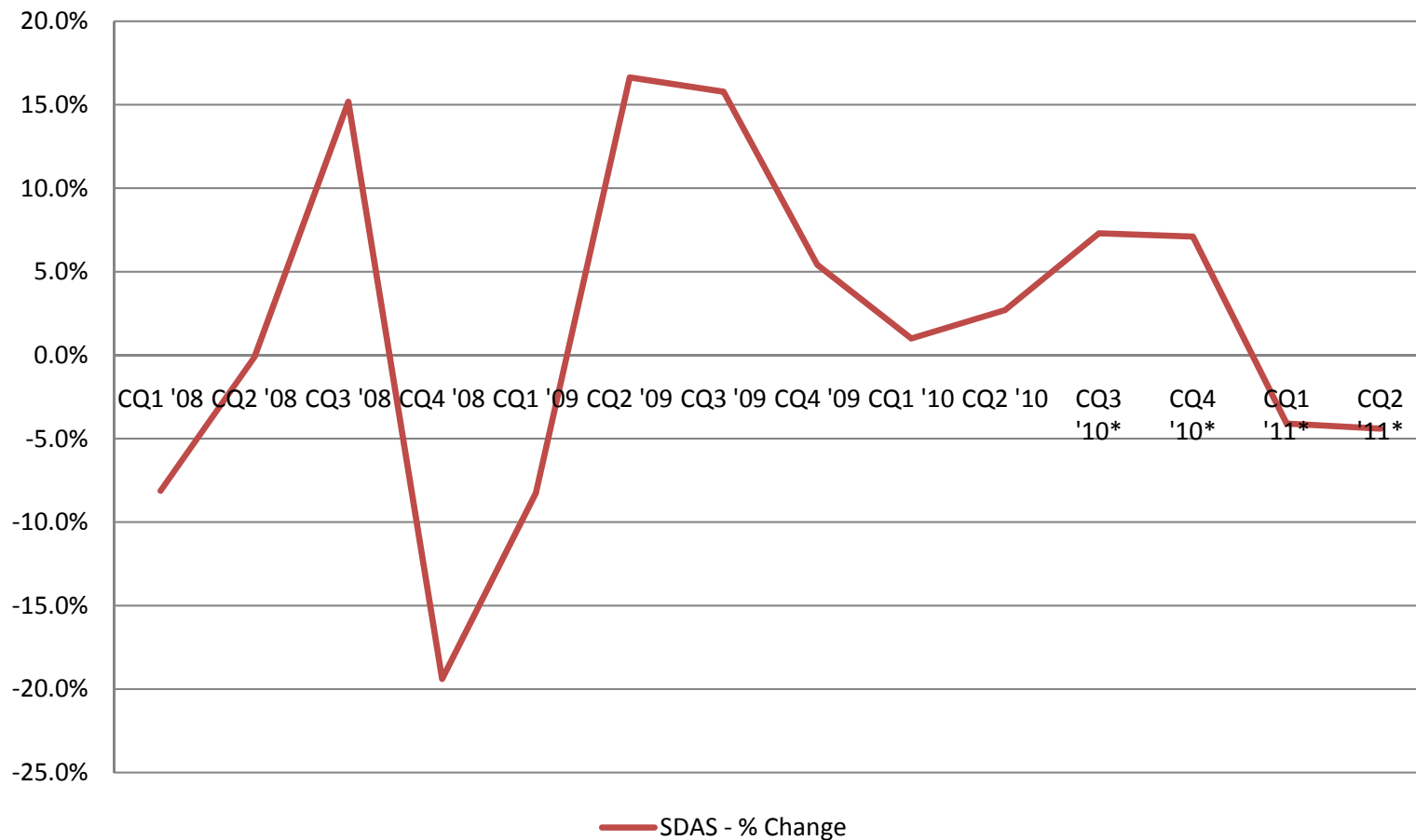
# HDD Shipments: 2008 - 2014

- Solid growth continues, but....



# New Seasonality?

## HDD Quarterly Shipment % Change (CQ1 '08 - CQ2 '11)



# 2008 - 2014

- HDD market growth drivers
  - PCs: mobile/netbook
  - Servers: nearline
- Seasonal trends
  - CQ1 & CQ2: ???
  - CQ3 & CQ4: ???
- Developing nations
  - BRIC

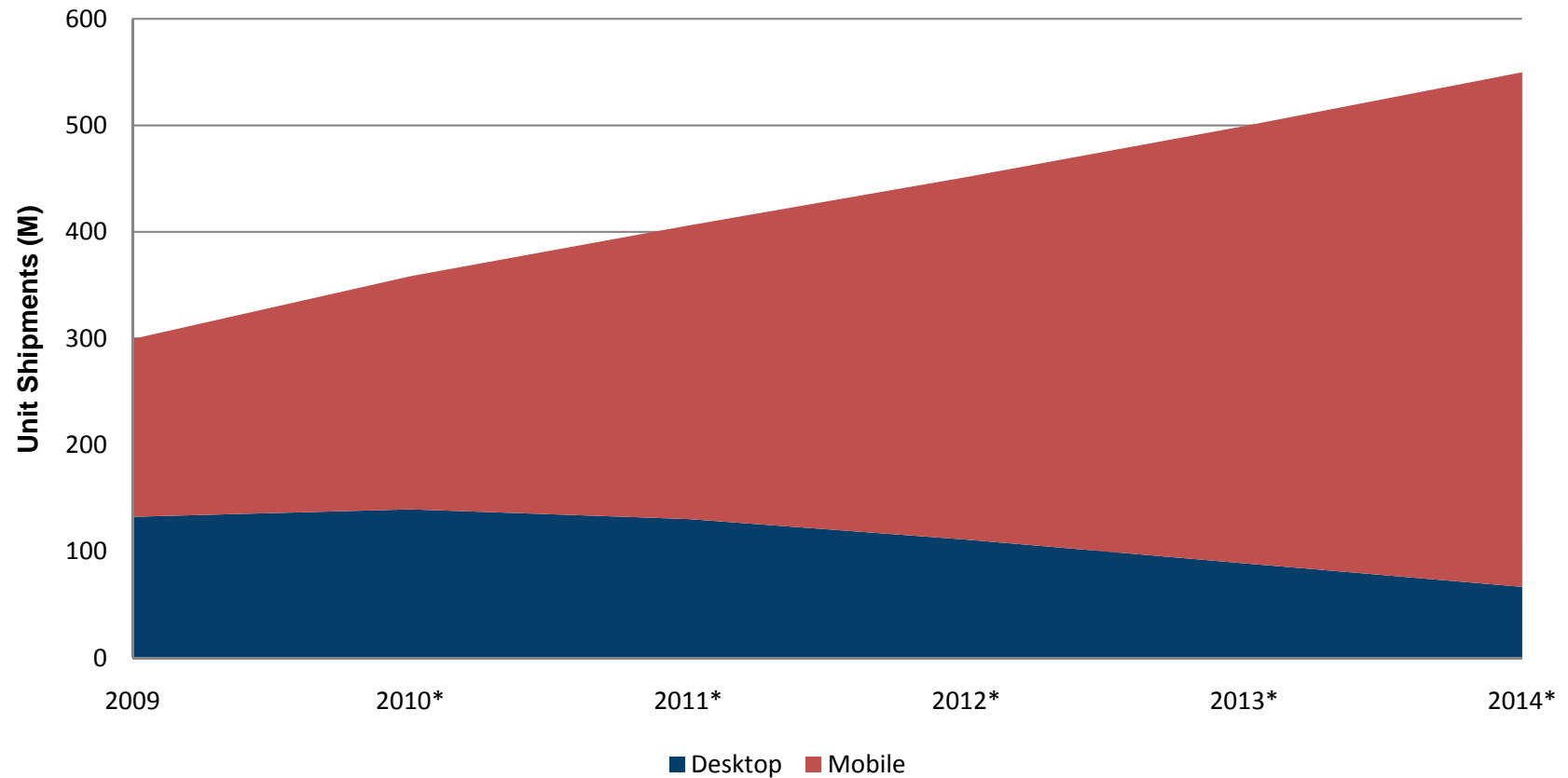


# PC Market Outlook

- 2010 – IT Refresh Accelerates
  - 18%+ increase over 2009
  - Mobile, desktop growth in 2010
  - Netbook impacted by iPad/other tablet PCs
- Near Term
  - Slowing recovery trims consumer demand
  - Pessimistic forecast could end at +13% Y-Y

# PC Forecast: 2009 - 2014

## PC Forecast 2009 - 2014

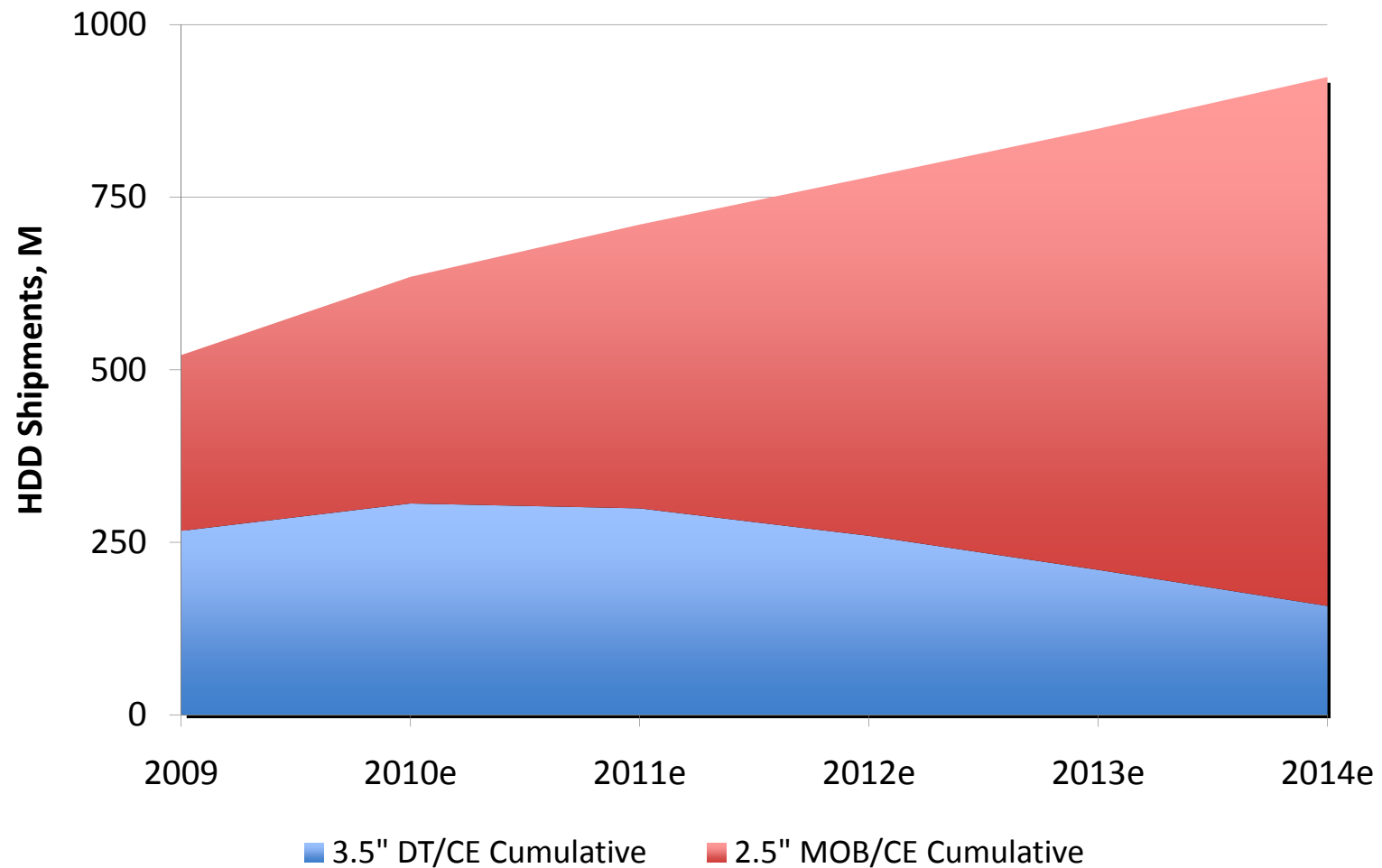


# HDD Market Outlook

- Record CQ1 breeds optimism for 2010
  - 162M HDDs – first CQ1 sequential rise ever
- CQ2 seasonality drops TAM to 157M
  - Industry adjusts overly-optimistic plans
- 2H demand will drive double digit growth
  - Forecast for 2H will result in 670M HDDs, up ~20% year over year
  - Pessimistic slowing growth may still achieve nearly 18% Y-Y rise

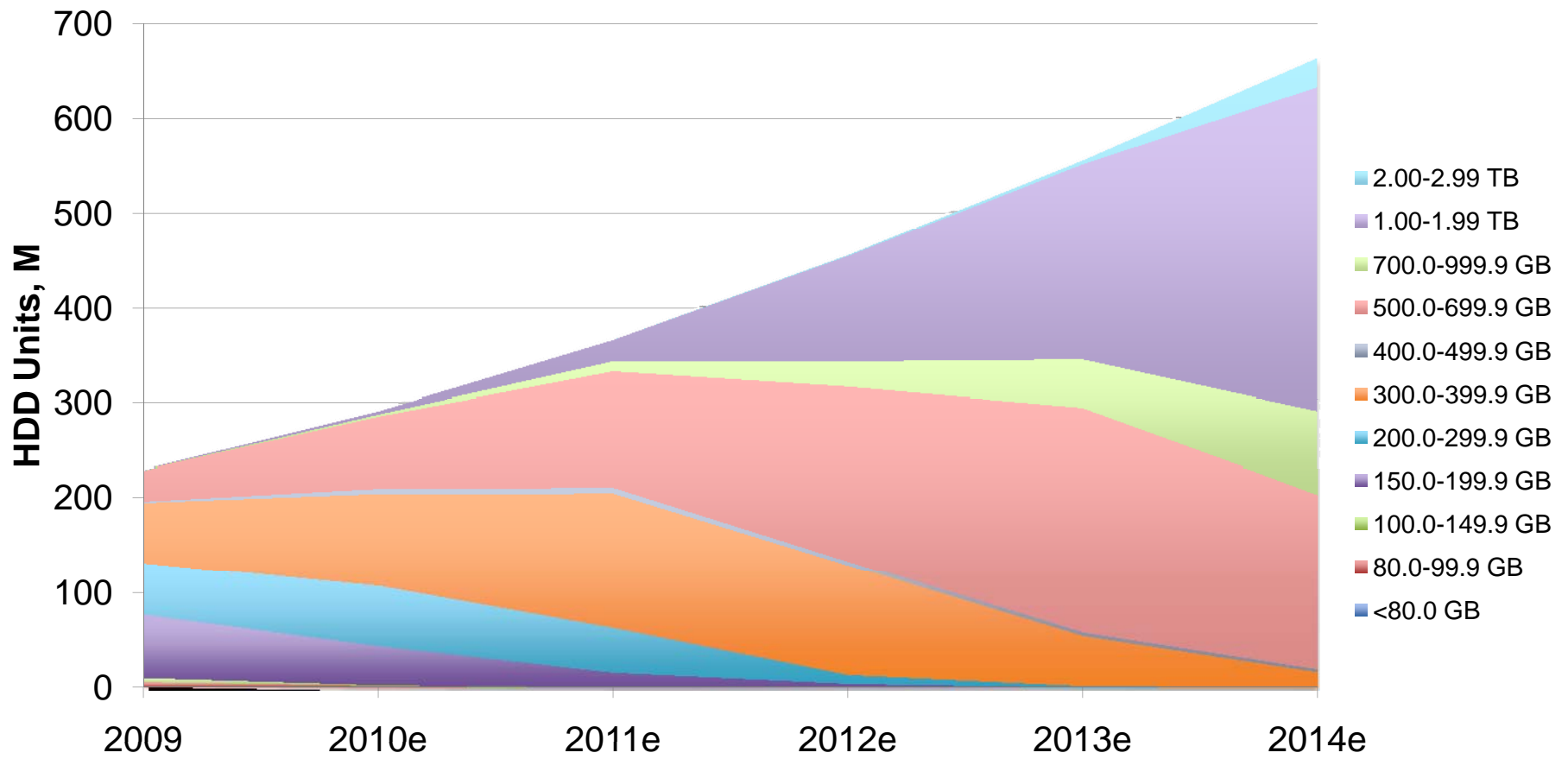
# 2.5" v. 3.5" Client and CE

- 2.5" grows with transition to mobile HDDs



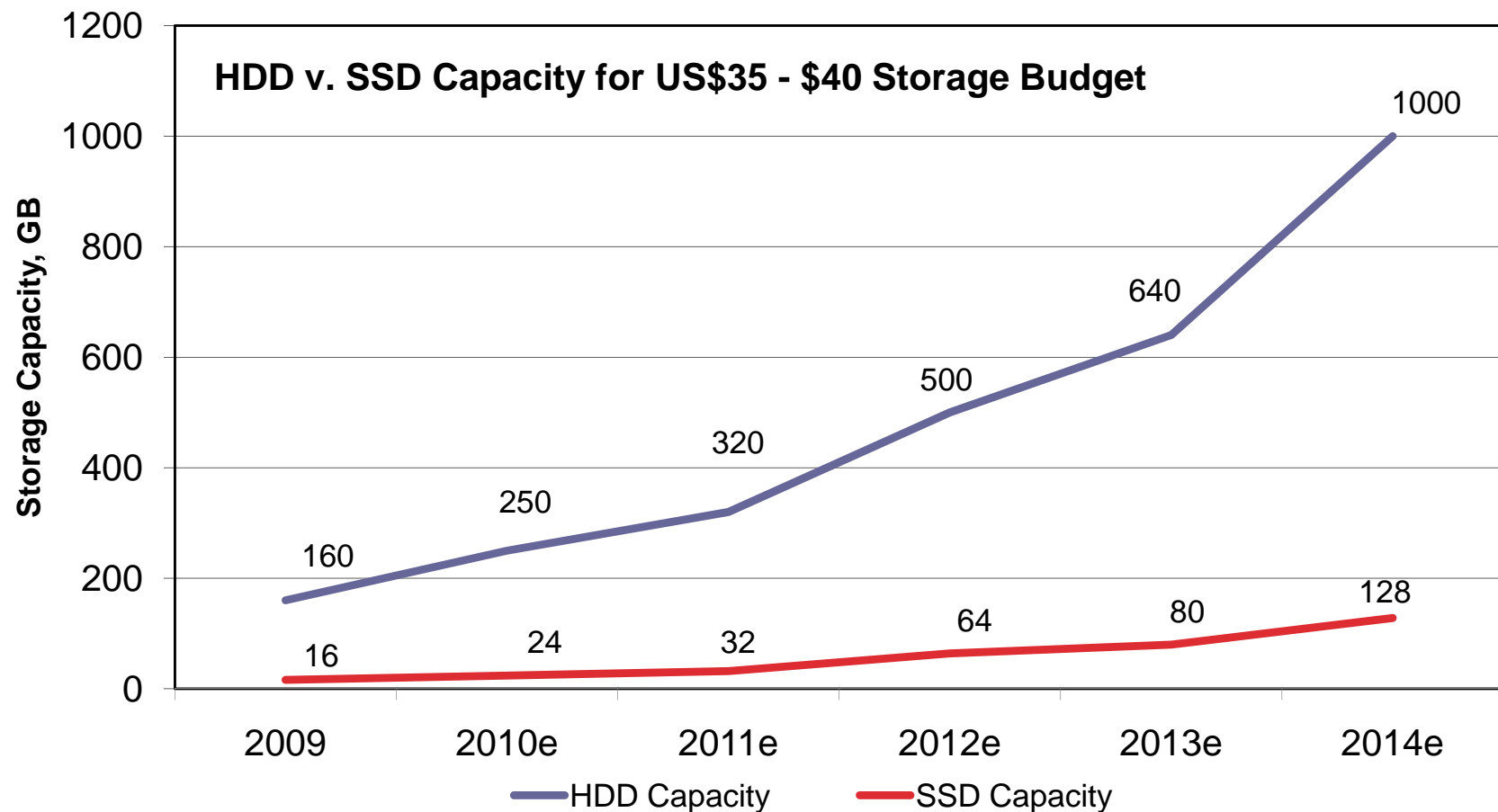
# Mobile HDDs - Capacity

- Areal density growth slowing



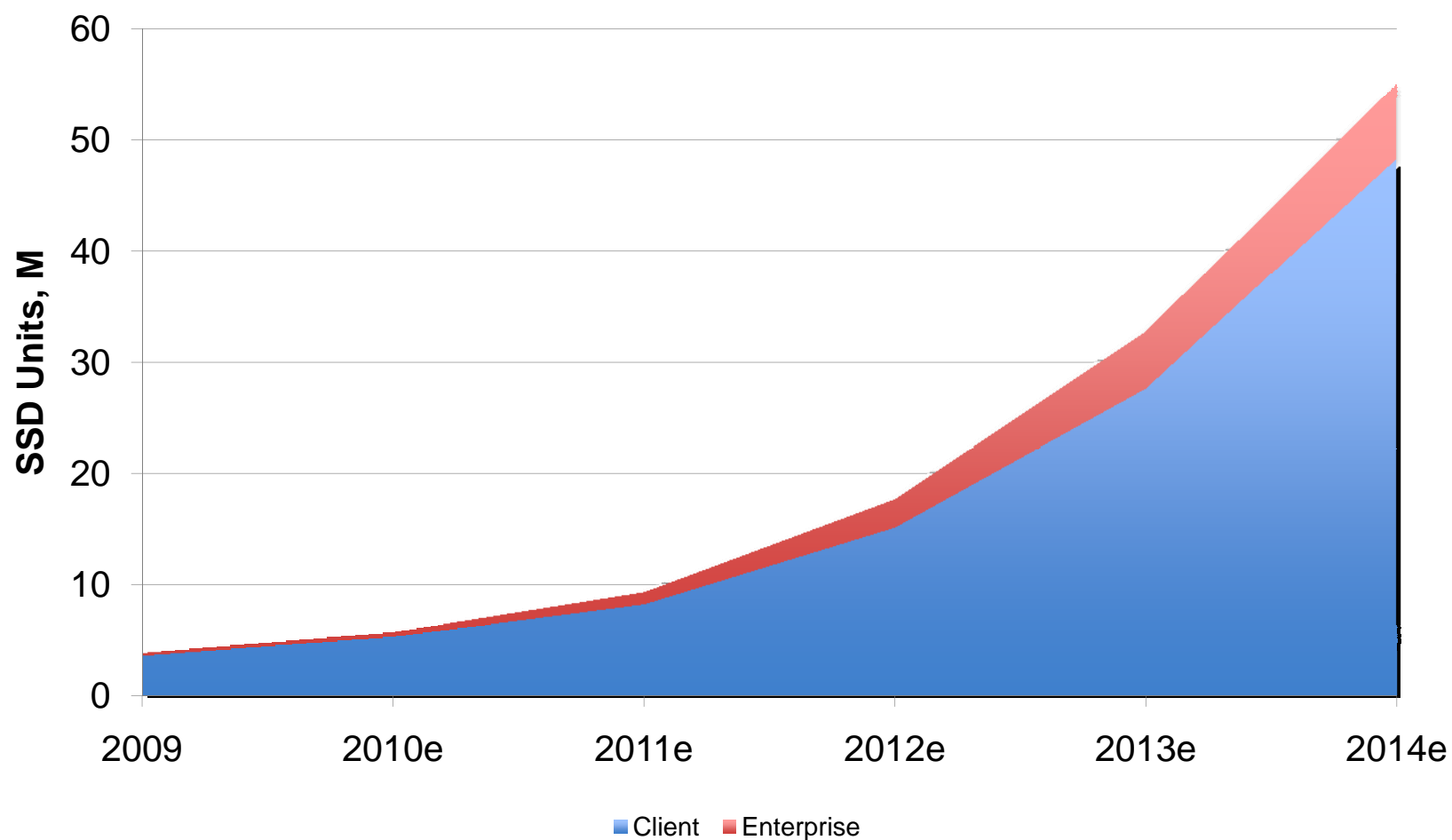
# SSD v HDD

- Capacity & price favor HDDs



# SSDs

- Steady growth, but small volumes



# Conclusions

- Time needed to adjust to new seasonal trends
- Different set of growth drivers will fuel solid growth for PC & HDD markets
- HDDs remain the most cost-effective storage medium available



# Thank You!

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